

Focused Site Inspection Prioritization Report

for the

Illinois Brick Company - Yard #17

USEPA ID No. ILD ~~048-305-684~~  
980 606 503

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Prepared for  
U.S. Environmental Protection Agency  
Contract 68-W8-0064  
Work Assignment 32-5JZZ

For U.S. Environmental Protection Agency, Region V

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## **1.0 Introduction**

On December 13, 1994 the Alternate Remedial Contracting Strategy (ARCS) V contractor was authorized, by approval of the work plan amendment by the U.S. Environmental Protection Agency (USEPA) Region V, to conduct a Focused Site Inspection Prioritization (FSIP) of several sites in Illinois.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) established a federal program for responding to the risks posed by uncontrolled releases of hazardous substances. CERCLA required the federal government to establish criteria for setting priorities among releases or threatened releases and specified these criteria be used to establish the National Priorities List. USEPA responded to these mandates by developing the Hazardous Ranking System (HRS) to more accurately quantify the relative risk posed by hazardous waste substance releases. A revised HRS was published in December 1990.

The objective of the FSIP is to review the outstanding screening site inspections (SSIs) performed before the implementation of the revised HRS for which a final decision regarding further action has not been made. The FSIP will determine whether the existing SSI information meets a minimum standard to reflect the revised HRS and if not, collect additional information by file review, reconnaissance and sampling on an as-needed basis. The FSIP will evaluate the threats posed to human health and the environment, and provide sufficient documentation for USEPA to decide the appropriate future course of action (No Further Remedial Action Planned, further evaluation, preparation of HRS package).

## **2.0 Site Background**

### **2.1 Site History**

The Illinois Brick Company - Yard #17 is located on the border of Chicago and Blue Island, Cook County, Illinois, at 1819 West 119th Street (northern half of Section 30, Township 37 North, Range 14 East). The site is divided into three parcels that cover a total area of approximately 90 acres. The western parcel is bordered by 119th Street, Division Street, 123rd Street, and the Rock Island Railroad. The middle parcel is bordered by Gallagher Asphalt, the Rock Island Railroad, 123rd Street, and Division Street. The eastern parcel is boot-shaped and is bordered by Interstate Highway 57 and the Rock Island Railroad. A site location map is included in Figure 1.

The Illinois Brick Company used the site from around 1930 until 1952 to excavate clay used for making bricks. The site was excavated to a depth of approximately 30 to 35 feet. John Sexton Contractors Company (Sexton) purchased the land and operated a landfill at the site until 1966. Over 3 million cubic yards of mixed municipal, commercial, and industrial waste were disposed of in the landfill.

The western side of the site was filled in first, and the eastern portion, which was holding water, was filled last. After closure of the landfill in 1966, methane venting flares were used by Sexton for several years. Additional fill was used as settling occurred. Unauthorized waste dumping, which occurred repeatedly, included concrete, trees, and other such "fly dumping". These materials were reportedly removed periodically. The site has no record of past regulatory or enforcement actions.

### **2.2 Past Site Characterization Studies**

A preliminary assessment (PA) was conducted by Illinois Environmental Protection Agency (IEPA) personnel on February 26, 1985. The report indicated that the site was a vacant field with no visible waste present.

On April 12, 1988, the USEPA Field Investigation Team (FIT) contractor performed an SSI of the site. The SSI included a site representative interview and a site reconnaissance inspection. No buildings or workers were present at the site. According to the report, there was evidence of less than 1-foot to 2-foot cover over some areas of the landfill. As part of the investigation, three surface soil samples, two subsurface soil samples, and two potential background soil samples were collected and analyzed. The analytical data indicated low levels of fluoranthene,

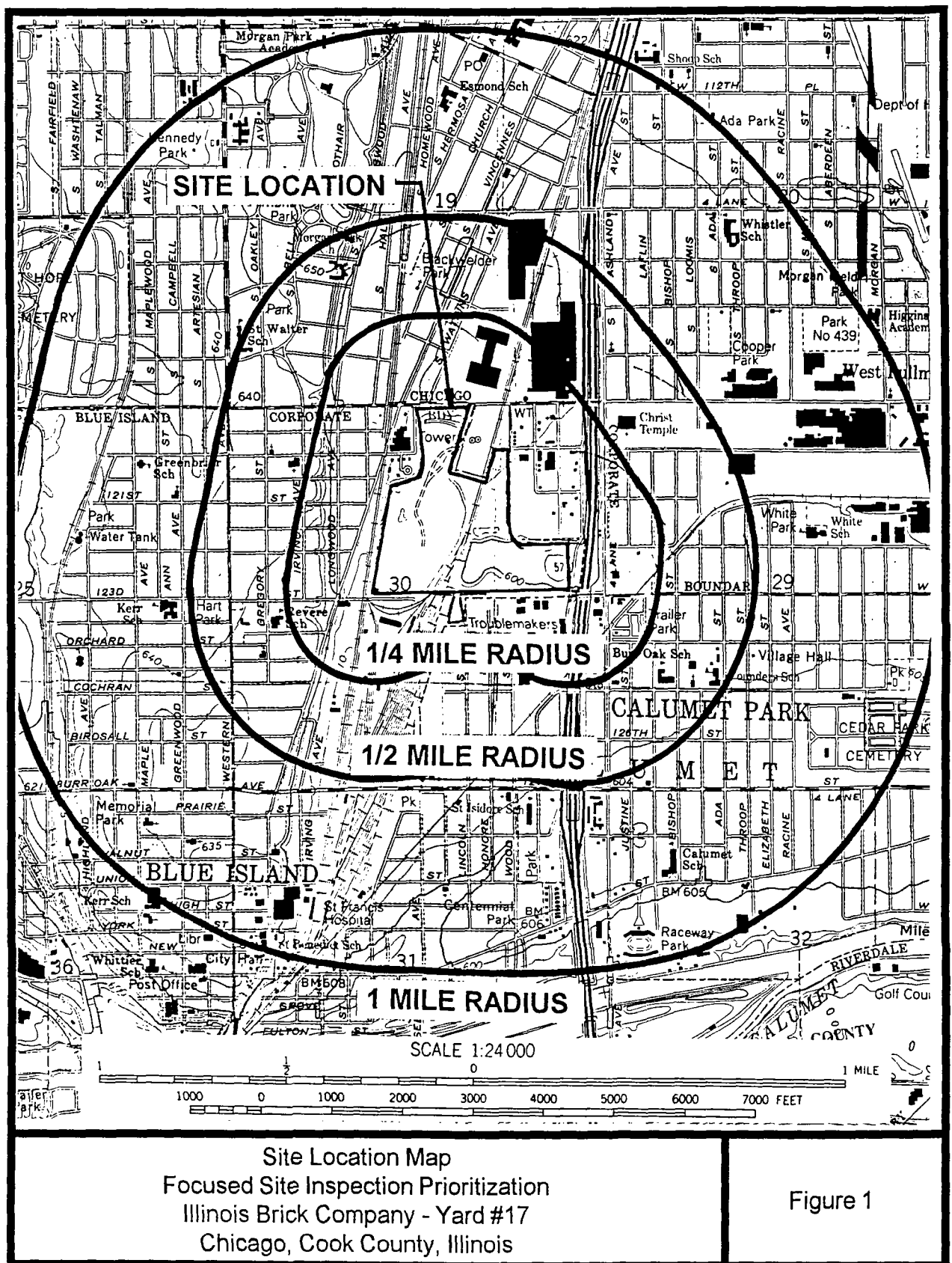


Figure 1

Source: USGS Blue Island IL Quadrangle, 7.5 minute series, 1963

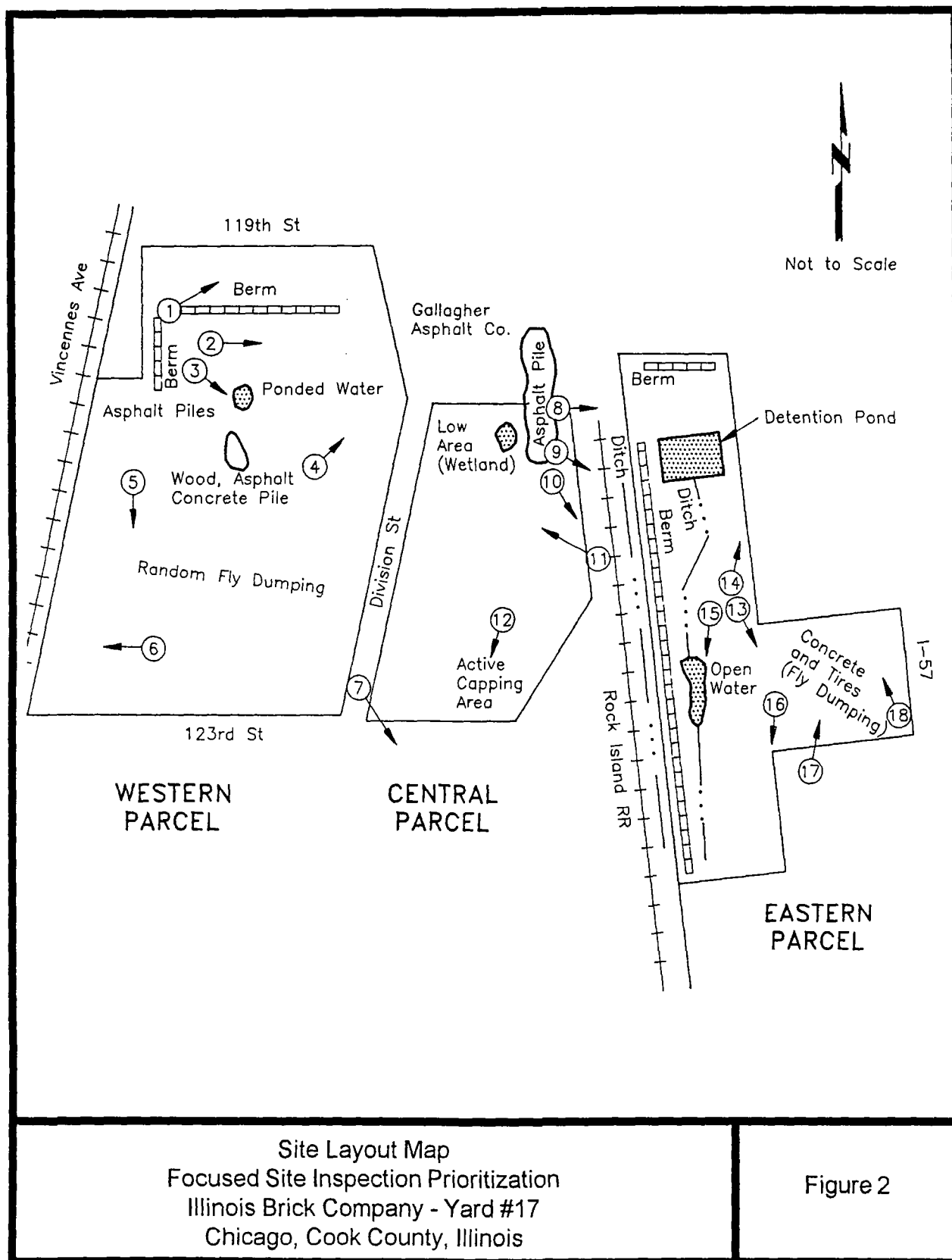
ethyl benzene, xylene, pyrene, cobalt, and silver attributable to the site. There were no groundwater or surface water samples collected.

## **2.3 FSIP Site Reconnaissance/Sampling**

On May 18 and 19, 1995, a reconnaissance of the Illinois Brick Company-Yard #17 site was conducted by the USEPA ARCS contractor. Arthur A. Daniels and Dave Vladic were present as representatives of Sexton during the reconnaissance. A site layout map, including the directions of photographs taken during the reconnaissance, is included in Figure 2. Photographs are contained in Appendix A.

The property is currently in a trust for Ms. Eileen Sexton and may be donated to the city for development of a light industrial park in June 1995. The property to the east of the old Rock Island Railroad has a 6-foot to 14-foot clay cap. The area west of the railroad has at least a 1-foot to 3-foot cap. Sexton has been adding more clay over the last three or four years. When completed, the cap will be a minimum of 6 feet on the entire site. Troublemakers Park, presently located south of the site, may be moved onsite so that residential development of the park site can occur. Gallagher Asphalt, on the northern boundary of the site, is currently inactive.

There are bike trails in several areas of the site, indicating that the site is used for some recreational activity. There are no wetlands onsite. Water from Lake Michigan is used in Chicago and surrounding suburbs for drinking water. Runoff from the site enters the storm sewer system and is treated by the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC).



Source: USEPA V ARCS Contractor, August 29, 1995

### **3.0 Pathway Evaluation**

The program evaluated four contaminant transport pathways: groundwater, surface water, soil exposure, and air.

#### **3.1 Groundwater Pathway**

The Illinois Brick Company-Yard #17 is located in Cook County in the Chicago Lake Plain, which is characterized by very flat terrain. Thin clay and silt deposits overlying bedrock are the predominant geological features in much of the area. The possibility exists that water-bearing materials are found in this surficial layer, although the layer is thin. Bedrock is encountered at a depth of approximately 50 feet in the vicinity of the site, and consists primarily of Silurian dolomite. The deep Cambrian-Ordovician aquifer group, composed generally of limestone and sandstone, is found at a depth of greater than 1,000 feet below the site.

The majority of the population within four miles of the site obtain their drinking water from Lake Michigan. There is one public drinking water well, owned and operated by the Crestwood subdivision, within a 4-mile radius of the site, located approximately 3.9 miles west southwest of the site. The well draws its supply from the Silurian dolomite formation underlying the site, and serves a population of 10,783.

#### **3.2 Surface Water Pathway**

Runoff from the Illinois Brick Company-Yard #17 is precluded from entering surface water because of urban development in the vicinity of the site. Therefore, a surface water pathway was not evaluated for the site. The runoff is captured by a combined sewer system, which leads to a MWRDGC treatment facility. The water is treated before discharge into waterways that flow into Lake Michigan.

The Little Calumet River is the nearest perennial water body, located approximately 1 mile south of the site. Lake Michigan is approximately 8 miles east of the site.

#### **3.3 Soil Exposure Pathway**

The site is accessible, although ditches and berms are present along a portion of the site boundary. Sexton is presently capping a portion of the site with clay. There is evidence of recreational use in the non-active areas, since motorcycle and dirt bike trails were noted. The surrounding area is urban. A cover is maintained over the landfilled



portion of the site, consisting of at least several feet of clay. The surface has a lack of vegetation in several locations.

### **3.4 Air Pathway**

No documented air releases are known and none were observed during the FSIP. Methane vents were used after closure of the site for several years, but were not present when the 1988 SSI was conducted. Approximately 110,548 people live within a 4-mile radius of the site. Sensitive environments within a 4-mile radius include several state and federally listed birds and plants.

## **4.0 Summary**

The ARCS V contractor conducted a thorough review of the available files associated with the Illinois Brick Company-Yard #17 site and concluded that the landfilled wastes constitute a possible source of contamination for several migration pathways; however, the landfill has not received wastes since 1966 and has been inspected on several occasions. The landfill is in an urban environment; the majority of the population obtain drinking water from Lake Michigan, and there is no surface water pathway. Soil exposure is limited because of the clay material that has been added periodically to cover the waste. Based on these observations, no sampling was conducted for the FSIP at the Illinois Brick Company-Yard #17.

## **5.0 References**

R. E. Bergstrom et al., "Groundwater Possibilities in Northeastern Illinois," Circular 198, State of Illinois, Division of the State Geological Survey, 1955.

ARCS Contractor telephone memorandum with Metropolitan Water Reclamation District of Greater Chicago to Illinois Brick Company-Yard #17 File, August 25, 1995, Subject: Combined Sewer System in Chicago Area.

ARCS Contractor, Site Reconnaissance Field Log Book, Illinois Brick Company-Yard #17, May 18-19, 1995.

Bureau of the Census, Graphical Exposure Modeling System, Cook County, Illinois, Data Down Load by E. A. Peterson, ARCS Contractor, April 1995.

Federal Emergency Management Agency, Flood Insurance Rate Maps: City of Chicago, Illinois, Community Panel Number 170074 0115 B; Blue Island, Community Panel Number 170064 0003 C.

FIT Contractor, Draft Screening Site Inspection Report, September 8, 1988.

FIT Contractor, Site Inspection Notes, April 12, 1988.

George M. Hughes, Paul Kraatz, and Ronald A. Landon, "Bedrock Aquifers of Northeastern Illinois," Circular 406, Illinois State Geological Survey, 1966.

IEPA, Division of Public Water Supplies, "List of Public and Food Processing Water Supplies Utilizing Surface Water," July 1983.

IEPA, Division of Public Water Supplies, "GWM Raw Source Location Report, Facility Order," July 16, 1992.

List of Illinois Endangered and Threatened Species Groups by County, Illinois Natural Heritage Database, April 1995.

USEPA Notification of Hazardous Waste Site, June 9, 1981.

U.S. Geological Survey (USGS), 7.5 minute series Topographic Quadrangle Maps: Blue Island, IL (1993); Calumet City, IL-IN (1991); Harvey, IL (1993); Lake Calumet, IL-IN (1991).

H. B. Willman, "Summary of the Geology of the Chicago Area," Circular 406, Illinois State Geological Survey, 1971.

Appendix A  
Site Reconnaissance Photographs

**Date:** May 19, 1995  
**Time:** 1336  
**Photo Taken By:** R. Reints  
**Photo Number:** 1  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
east northeast.  
**Description:** In NW corner  
of site - broken concrete.



**Date:** May 19, 1995  
**Time:** 1336  
**Photo Taken By:** R. Reints  
**Photo Number:** 2  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
east.  
**Description:** In NW corner  
- Gallagher Asphalt from  
across the site.





**Date:** May 19, 1995  
**Time:** 1336  
**Photo Taken By:** R. Reints  
**Photo Number:** 3  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
east southeast.  
**Description:** In NW corner.  
View of the north part of the  
west parcel.



**Date:** May 19, 1995  
**Time:** 1342  
**Photo Taken By:** R. Reints  
**Photo Number:** 4  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
northeast.  
**Description:** Asphalt in  
west parcel - central part of  
parcel.





**Date:** May 19, 1995  
**Time:** 1346  
**Photo Taken By:** R. Reints  
**Photo Number:** 5  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
south.  
**Description:** West parcel.  
Bike path, black chips on  
ground as per SSI notes.



**Date:** May 19, 1995  
**Time:** 1357  
**Photo Taken By:** R. Reints  
**Photo Number:** 6  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
west.  
**Description:** Miscellaneous  
trash, at south end of west  
parcel.





**Date:** May 19, 1995  
**Time:** 1403  
**Photo Taken By:** R. Reints  
**Photo Number:** 7  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
south southeast.  
**Description:** From Division  
St., middle parcel. Berm,  
then piled fill.



**Date:** May 19, 1995  
**Time:** 1407  
**Photo Taken By:** R. Reints  
**Photo Number:** 8  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
east.  
**Description:** East-most  
parcel from asphalt pile.





**Date:** May 19, 1995  
**Time:** 1407  
**Photo Taken By:** R. Reints  
**Photo Number:** 9  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
east southeast.  
**Description:** East-most  
parcel from asphalt pile.



**Date:** May 19, 1995  
**Time:** 1407  
**Photo Taken By:** R. Reints  
**Photo Number:** 10  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
south southeast.  
**Description:** Middle piece  
from asphalt pile.





Date: May 19, 1995  
Time: 1410  
Photo Taken By: R. Reints  
Photo Number: 11  
Site/ILD No.: Illinois Brick  
Company - Yard #17/ILD  
980606503  
Direction of Photo: Facing  
northwest.  
Description: Middle and  
west properties.



Date: May 19, 1995  
Time: 1417  
Photo Taken By: R. Reints  
Photo Number: 12  
Site/ILD No.: Illinois Brick  
Company - Yard #17/ILD  
980606503  
Direction of Photo: Facing  
southwest.  
Description: South end of  
middle parcel.





Date: May 19, 1995  
Time: 1445  
Photo Taken By: R. Reints  
Photo Number: 13  
Site/ILD No.: Illinois Brick  
Company - Yard #17/ILD  
980606503  
Direction of Photo: Facing  
south southeast.  
Description: East parcel.  
Note trails.



Date: May 19, 1995  
Time: 1451  
Photo Taken By: R. Reints  
Photo Number: 14  
Site/ILD No.: Illinois Brick  
Company - Yard #17/ILD  
980606503  
Direction of Photo: Facing  
north northeast.  
Description: Trail bike area.





Date: May 19, 1995  
Time: 1453  
Photo Taken By: R. Reints  
Photo Number: 15  
Site/ILD No.: Illinois Brick  
Company - Yard #17/ILD  
980606503  
Direction of Photo: Facing  
south.  
Description: Open water  
and cattails.



Date: May 19, 1995  
Time: 1500  
Photo Taken By: R. Reints  
Photo Number: 16  
Site/ILD No.: Illinois Brick  
Company - Yard #17/ILD  
980606503  
Direction of Photo: Facing  
south.  
Description: Toward  
Troublemakers Park.





**Date:** May 19, 1995  
**Time:** 1500  
**Photo Taken By:** R. Reints  
**Photo Number:** 17  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
north northeast.  
**Description:** None recorded.



**Date:** May 19, 1995  
**Time:** 1514  
**Photo Taken By:** R. Reints  
**Photo Number:** 18  
**Site/ILD No.:** Illinois Brick  
Company - Yard #17/ILD  
980606503  
**Direction of Photo:** Facing  
northwest.  
**Description:** Southeast  
corner of east corner.

